



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/369,790	08/06/1999	JETHRO F. STEINMAN	120-25410	7258
128	7590	09/20/2005	EXAMINER	
HONEYWELL INTERNATIONAL INC.			TRUONG, LECHI	
101 COLUMBIA ROAD			ART UNIT	
P O BOX 2245			PAPER NUMBER	
MORRISTOWN, NJ 07962-2245			2194	

DATE MAILED: 09/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/369,790

Applicant(s)

STEINMAN ET AL.

Examiner

LeChi Truong

Art Unit

2194

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-37 are represented for the examination.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 1-30 are rejected under 35 U.S.C. 101 because they are directed to non-statutory subject matter.
3. Claims 1-9, 19-24 are non-statutory because it is not tangibly embodied in a manner so as to be executable as the only hardware is in an intended use statement.

Claims 1 and 19 define "System" in the preamble and the body of the claim recites "a check code generator", "an interface verifier", and "interface identifier". Check code generators, an interface verifier, interface identifier, which are not tangible. Therefore, claims 1, 19 are non-statutory because it recites a system claim that comprises non-tangible embodiments.

4. Claims 10, 25 are directed to method steps, which can be practiced mentally in conjunction with pen and paper, therefore they are directed to non-statutory subject matter. Specifically, as claimed, it is uncertain what performs each of the claimed method steps. Moreover, each of the claimed steps, transforming, coupling, employing, can be practiced mentally in conjunctions with pen and paper. The claimed steps do not define a machine or computer implemented process (see MPEP 21061). Therefore, the claimed invention is directed to non-statutory subject matter. (The examiner suggests applicant to change "method" to

Art Unit: 2194

"computer implemented method" in the preamble to overcome the outstanding 35 U.S.C. 101 rejections).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3-7, 10, 12-16, 19-31, 33-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Waldo et al (US. Pat 5,815,709) in view of Cowsar et al (US. Patent 5,615,400) and further in view of Orr (US. Patent 5,748,963).

6. As to claim 1, Waldo teaches the invention substantially as claimed including: a interface (objects, col 6, ln 9-12/interface 41, Fig.2, col 4, ln 27-65/ col 8, ln 1-60/ the object fingerprint value, col 6, ln 36-67), a check code generator (a new fingerprint generator, col 2, ln 30-67/ col 6, ln 6-12 and ln 13-18), interface identifier (a fingerprint to identify the type of the object, col 6, ln 14-16), a check code generator that transform said interface into an interface identifier (col 6, ln 6-16).

7. Waldo does not explicitly teach an interface of dynamically linkable component, couples said interface identifier to said dynamically linkable component and an interface verifier that employs said interface identifier to determine a compatibility of said interface of said

Art Unit: 2194

dynamically linkable component. However, Cowsar teaches an interface of dynamically linkable component (the public virtual and non-virtual member functions of such dynamically linked classes, col 2, ln 33-36), couples said interface identifier to said dynamically linkable component (the resource set catalog identifies a plurality of function sets by respective function set Ids, col 3, ln 7-11/ ln 15-22/ ln 40-45/ the a dynamic class catalog which given a class ID, col 5, ln 21-25/ col 10, ln 14-18/ col 173, ln 35-39) and an interface verifier that employs said interface identifier to determine a compatibility of said interface of said dynamically linkable component(a lookup engine coupled with the resource set catalog, and the dispatch engine, is responsive to the particular function set ID to look up a set record for a corresponding function set in the resource set catalog, col 3, ln 16-22/ col 8, ln 32-38/ col 11, ln 35-40/ col 173, ln 40-44).

8. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Waldo and Cowsar because Cowsar's teaching of interface with dynamically linkable component would increase the flexibility of Waldo's system by allowing the clients to dynamically determine the availability and compatibility of classes without recompiling the clients.

9. Waldo and Cowsar do not explicit teach comparing interface identifier with an interface identifier history list containing at least one member. However, Orr teaches comparing interface identifier with an interface identifier history list containing at least one member (when function call occurs the dictionary is searched for an entry having a function identifier matching that the function call and having formal arguments that match the actual arguments of function call, col 2, ln 15-20/ searching the dictionary to determine a fist dictionary entry having a function identifier and formal function argument information corresponding to the function identifier and

Art Unit: 2194

actual function argument information of the function call, col 7, ln 47-51), an interface identifier history list(col 2, ln 60-65).

10. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Waldo, Cowsar and Orr because Orr's comparing interface identifier with an interface identifier history list containing at least one member would increase the integrity of Waldo and Cowsar's systems by allowing the mechanism to handle multiple types of arguments of function call without creating additional memory structures.

11. **As to claim 3**, Waldo teaches a types declaration file (a object fingerprint table 32, col 6, ln 37-67).

12. **As to claim 4**, Cowsar teaches a version (the version of function set, col 60, ln 39-67).

13. **As to claims 5, 6**, Cowsar teaches a second dynamically linkable component (the form of new shared class libraries, col 2, ln 40-67, the second level dispatch routine, col 3, ln 39-50/ col 8, ln 21-31, Fig 5A, 92).

14. **As to claim 7**, Cowsar teaches a history list (Viable record, col 8, ln 56-61).

15. **As to claim 10**, it is an apparatus claim of claim 1; therefore, it is rejected for the same reason as claim 1 above.

16. **As to claim 12**, Cowsar teaches declaration file (this declaration defines the ID of the library, col 57, ln 45-51).

17. **As to claims 13-15**, they are apparatus claims of claims 4-6; therefore, they are rejected for the same reasons as claims 4-6 above.

18. **As to claim 16**, Cowsar teaches interface identifier (function set ID, col 3, ln 13-32), a history list (TClass record, col 11, ln 32-45).

Art Unit: 2194

19. As to claims 19-21, they are apparatus claims of claims 8, 10, 12, 13; therefore, they are rejected for the same reasons as claims 8, 10, 12, 13 above.

20. As to claim 22, it is an apparatus claim of claim 14; therefore, it is rejected for the same reason as claim 14 above. In additional, Cowsar teaches interface verifier (a lookup engine, col 3, ln 13-28).

21. As to claims 23-24, they are apparatus claims of claims 15, 24; therefore, they are rejected for the same reasons as claims 15, 24 above.

22. As to claim 25, it is an apparatus claim of claim 1; therefore, it is rejected for the same reason as claim 1 above.

23. As to claims 26-30, they are apparatus claims of claims 20, 21, 5, 6, 16; therefore, they are rejected for the same reasons as claims 20, 21, 5, 6, 16 above.

24. As to claim 31, it is an apparatus claim of claim 1; therefore, it is rejected for the same reason as claim 1 above. In additional, Waldo teaches a plurality of sensors and controllable devices (video display unit, operator input device, col 3, ln 24-67/ fig.1).

25. As to claim 33, it is an apparatus claim of claim 12; therefore, it is rejected for the same reason as claim 12 above.

26. As to claim 34, it is an apparatus claim of claim 4; therefore, it is rejected for the same reason as claim 4 above. In additional, Cowsar teaches the term dynamic linking systems (col 2, ln 1-26), the form of new-shared class libraries (col 2, ln 40-67).

27. As to claims 35, 36, they are apparatus claims of claims 6, 5, 7; therefore, they are rejected for the same reasons as claims 6, 5, 7 above.

Art Unit: 2194

28. Claims 8, 17, 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Waldo et al (US. Pat 5,815,709), Cowsar (U.S Patent 5,615,400) in view of Orr (US. Patent 5,748,963), as applied to claim 1 above, and further in view of Tate et al (US. Patent 5,991,774).

29. As to claim 8, Waldo, Cowsar and Orr do not teach a check sum, a cyclic redundancy check. However, Tate teaches a check sum, a cyclic redundancy check (a check sum, CRC, col 1, ln 14-43/ col 2, ln 1-33/ col 7, ln 14-48).

30. It could have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Waldo, Cowsar, Orr and Tate because Tate's a check sum, a cyclic redundancy check would improve the efficiency of Waldo, Cowsar and Orr's systems by allowing protection of files and installed version software on any program to against viruses, tampering, or corruption.

31. As to claims 17, 37, they are apparatus claims of claim 8; therefore, they are rejected for the same reason as claim 8 above.

32. Claims 2, 11, 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Waldo et al (US. Pat 5,815,709), Cowsar (U.S Patent 5,615,400) in view of Orr (US. Patent 5,748,963), as applied to claim 1 above, and further in view of Lipe (US. Patent 5,548,759).

33. As to claim 2, Waldo, Cowsar and Orr do not teach a textual ... a portion of said interface. However, Lipe teaches a textual ... a portion of said interface (text file, col 5, ln 1-65).

Art Unit: 2194

34. It could have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Waldo, Cowsar, Orr and Lipe because Lipe's text file would improve the efficiency of Waldo, Cowsar, Orr's systems by providing the generator transform interface more available to use for any file system formats.

35. As to claims 11, 32, they are apparatus claims of claim 2; therefore, they are rejected for the same reason as claim 2 above.

36. Claims 9, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Waldo et al (US. Pat 5,815,709), Cowsar (U.S Patent 5,615,400) in view of Orr (US. Patent 5,748,963), as applied to claims 1 and 10 above, and further in view Levy (US. Patent 6,505,160 B1).

36. As to claim 9, Waldo, Cowsar and Orr do not explicit teach filtering. However, Levy teaches filtering (filtered version, col 9, ln 45-61/ col 16, ln 54-57).

37. It could have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Waldo, Cowsar, Orr and Levy because Levy's filtering would improve the throughput of Waldo, Cowsar, Orr's systems by allowing only a portion of a file to create a file ID.

38. As to claim 18, it is an apparatus claim of claim 9; therefore, it is rejected for the same reason as claim 9 above.

Conclusion

Art Unit: 2194

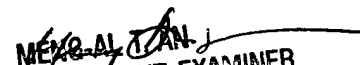
Any inquiry concerning this communication or earlier communications from the examiner should be directed to LeChi Truong whose telephone number is (571) 272 3767. The examiner can normally be reached on 8 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIP. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIP system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).

LeChi Truong

September 16, 2005


MENG-AI AN
SUPERVISORY PATENT EXAMINER
EBC CENTER 2100